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Notice of Allowability

Application No.

10/523,668

Examiner

Nikita Wells

Applicant(s)

NABLO ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed 28 April 2005.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 03/28/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Nikita Wells
Primary Examiner
Art Unit: 2881

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-3 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With respect to the independent claim 1, prior art fails to disclose or make obvious a method of irradiating, in a gaseous medium, a hollow open-mouthed container having an axis and having walls of varying thickness, which method comprises directing primary electrons laterally against said container as a sheet extending along said axis and more than the length of said axis, said primary electrons having energy insufficient to penetrate through the entire container (i.e. two walls) at the thicker portions of said walls but sufficient to penetrate the entire container (i.e. two walls) at the thinner portions of said walls, the dose delivered to said thicker portions by said primary electrons being supplemented by secondary electrons produced by scattering of said primary electrons by said gaseous medium and said container.

With respect to the independent claim 2, prior art fails to disclose or make obvious a method of using reduced electron energy for the sterilization of preformed open-mouthed containers, comprising the following steps: producing an electron sheet in an electron-scattering gaseous region with a cross-sectional length L and width W, conveying an open-mouthed container having an axis with a length less than L transversely through said sheet in such a manner that the extremities of said sheet by-pass said container while the region between said extremities passes through said container, said axis being parallel to said sheet as said container passes through said sheet, the energy of said electrons being sufficient to provide the required minimum dose to all surfaces of said container while remaining below that required for full

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penetration of the thicker regions of the container. The key element in this invention is the use of a primary electron beam with an energy being sufficient to provide the required minimum dose to all surfaces of said container while remaining below that required for full penetration of the thicker regions of the container.

The dependent claim 3 is allowable by virtue of its dependence upon the independent claim 2.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thompson et al. (4,983,849) disclose an apparatus and method for attenuating the energy and increasing the angular scattering of an electron beam for promoting dose uniformity in irradiated target products, but using a beam energy which is greater than that necessary to achieve an equal entrance and exit for the average product density of the target product. Bol et al. (7,067,827 B2) disclose an apparatus and method for irradiating a product package with an electron beam with reflection means and adjusting the reflection means to the conveyor and beam in order to improve the dose uniformity in the product package.

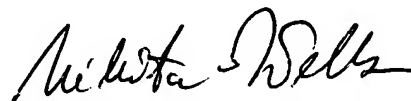
4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by

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telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The central fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nikita Wells, Primary Examiner
Art Unit 2881
September 27, 2006